

## CASE STUDY

# High Performance and Reliability at Northumbrian Water

Northumbrian Water supplies 2.7 million people with water and wastewater services in the North East of the United Kingdom. Providing customers with great customer service is at the heart of all the company does, and supplying excellent quality tap water is vital as part of this. The pumps at the Scottswood Road pumping station were not working as well as they could. They were prone to blocking and had vibration problems that caused damage to the pump bowl. The installed pumps had channel hydraulics, which is not best suited for heavily ragged stations. Maintenance was needed at the site at least once a week.



Pump installation

“ Since the new XFP Contrablock Plus submersible sewage pumps were installed in November 2013 we have not been called out to the site to unblock the pumps. Earlier we were called out at least twice a week. ”

Robert Dickson Sewer Gang Team Leader Howdon STW

### The challenge

Northumbrian Water wanted high-performance pumps that would improve the effectiveness and reliability of the pumping station and deliver significant energy savings.

### The solution

- Two submersible pumps type ABS XFP 200J CB2 PE750/4 were installed in September 2013, including pedestals and twin guide rails.
- The pump controller type ABS PC441.CA551 was installed to monitor and control vibration levels and record failure modes, kW usage, and tank levels. The pump controller also monitors temperature and mechanical seal leakage.
- The controller is linked to an existing telemetry system and utilizes ultrasonic level control.
- Bespoke product training provided for electrical, mechanical and operational staff.

### Customer benefit

- The pumping station is now very reliable with zero call out cost for Northumbrian water. To date there has been no need to request a call out to unblock the pumps at the site.
- This gives financial savings and allows the sewer gang team to work in other areas. This means that the sewer gang team can be more efficient as a result.
- The pumps have smaller motors, which use less energy.
- Pump monitoring alarms with logging facilities provide ease of use and data gathering for the end user.
- The XFP range of pumps come as standard with our solids-handling Contrablock Plus impeller and premium efficiency motor.

### The Sulzer difference

The submersible sewage pump type ABS XFP was launched in 2009. Since then, it has expanded to comprise a complete range of world-class wastewater products. Their energy savings, reduced carbon footprint and high reliability contribute to efficient processes and satisfy the growing demands on the wastewater industry.



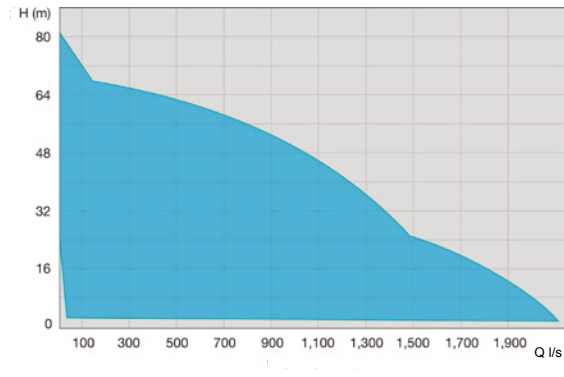
Twin guiderail

## Product data

Two submersible sewage pumps type ABS XFP 200J CB2 PE750/4

XFP200J – CB2.372	
Motor	PE750/4
Impeller	CB2 (Contrablock Plus)
Flow	146 l/s
Head	31.4 m
Efficiency	82%

The entire performance field of all XFP Contrablock Plus pumps



For more information on our products and solutions for wastewater treatment and collection, please visit [sulzer.com](http://sulzer.com)

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### Applicable markets

Wastewater collection

### Applicable products

Submersible sewage pumps  
type ABS XFP 200J CB2 PE750/4